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10/692,898	10/24/2003	Kumar Bhaskaran	YOR920030216US1 (16696)	8716
7590 03/04/2008 STEVEN FISCHMAN, ESQ. SCULLY, SCOTT, MURPHY AND PRESSER 400 Garden City Plaza Garden City, NY 11530				
EXAMINER CARDENAS NAVIA, JAIME F				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/692,898

Applicant(s)

BHASKARAN ET AL.

Examiner

Jaime F. Cardenas-Navia

Art Unit

4182

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Introduction

1. This **NON-FINAL** office action is in response to applicant's submission filed on October 24, 2003. Currently, claims 1-25 are pending.

Specification

2. The attempt to incorporate subject matter into this application by reference to U.S. Patent Application No. _____ is ineffective because the application number is not in the specification. Examiner was unable to locate the reference that applicant sought to incorporate by reference, and recommends applicant either remove references to Application No. _____ (found in par. 1 and par. 20) or amend the specification to properly incorporate Application No. _____.

Claim Objections

3. **Claims 1, 3-9, 11, 16-18, 20-22, and 25 are objected to** because of the following informalities:

Regarding claims 1, 18, and 25, when describing the data structures means, “the strategy model” should be changed to “the business strategy model” and “the operations model” should be changed to “the business operation model” to be more clear.

When describing the means for measuring business performance, “operation model process elements” should be changed to “business operation model process elements”.

Regarding claim 1, the “and” at the end of the means for modeling business operations description should be moved to the end of the data structure means description.

Regarding claims 3-8 and 20, “wherein solution artifacts” should be changed to “wherein said business solution artifacts” to be more clear.

Regarding claims 9 and 21, “one or more said IT” should be changed to “one or more of said IT”.

Regarding claim 11, “said business measuring means” should be changed to “said business performance measuring means” to be more clear.

Regarding claims 16 and 17, the “an” after represents should be removed.

Regarding claim 20, a comma should be added after business objects, adaptive business objects, and microflows.

Regarding claim 22, “in the operating model” should be added to the end of the claim to be more clear.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 14- 17 are rejected** under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 14, “said business level modeling language” lacks antecedent basis.

The claim should be amended such that it claims dependence to claim 13.

Regarding claims 16 and 17, “said schema” lacks antecedent basis. The claim should be amended such that it claims dependence to claim 14.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. **Claim 25 is rejected** under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A “computer storage device tangibly embodying a plurality of instruction for carrying out a method” does not fall into one of the four categories of patent eligible subject matter recited in 35 U.S.C. 101 (process, machine, manufacture, or composition of matter). Software, programming, instructions or code not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in a computer. When such descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases. Furthermore, software, programming, instructions or code not claimed as being computer executable are not statutory because they are not capable of causing functional change in a computer. In contrast, when a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer and the program, and the computer is capable of executing the program, allowing the program’s functionality to be realized, the program will be statutory.

For purposes of examination, claim 25 has been treated as a properly claimed computer program product.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 1-12, 18-23, and 25 are rejected** under 35 U.S.C. 102(c) as being anticipated by Abu El Ata (US 6,990,437 B1).

Regarding claim 1, Abu El Ata teaches a system for creating and managing a business process integration solution comprising:

means for modeling a business strategy including elements representing business measurements and initiatives according to defined business goals and objectives of an entity (col. 4, lines 8-10, 18-26 (criteria are objectives), and 40-41);

means for modeling business operations of said entity in terms of business process elements including process tasks, artifact flows and artifact repositories, said business process element incorporating key performance indicators (col. 4, lines 55-67, col. 5, lines 1-2, performance and cost criteria are key performance indicators, sub processes and functions are tasks, scope identification are artifacts flows, artifact repositories are inherent);

data structures means for mapping elements of the strategy model with artifact and process elements of the operations model (col. 4, lines 55-65); and

means for measuring business performance and comparing performance against said key performance indicators, wherein said business strategy and operation model process elements

may be continuously refined over a solution development lifecycle as a result of process measurements and comparing (col. 3, lines 37-44, col. 5, lines 19-25, col. 7, lines 45-47, col. 11, lines 14-20).

Regarding claim 2, Abu El Ata teaches means for transforming operations model elements into a platform independent information technology (IT) executable solution model comprising business solution artifacts (col. 2, lines 7-11, col. 5, lines 26-29, col. 6, lines 34-36, and col. 7, lines 10-13).

Regarding claim 3, Abu El Ata teaches wherein said business solution artifacts includes business objects representing business documents or materials, contracts or work products (col. 9, lines 22-31, loan applications are business documents).

Regarding claim 4, Abu El Ata teaches wherein said business solution artifacts includes adaptive business objects capturing state-dependent behavior (col. 9, lines 22-31, loan applications have different states).

Regarding claim 5, Abu El Ata teaches wherein said business solution artifacts includes macroflows representing interruptible process flows and micro flows representing represent non-interruptible process flows (col. 9, lines 54-60, critical path contains interruptible and non-interruptible process flows).

Regarding claim 6, Abu El Ata teaches wherein said business solution artifacts includes application adapters that transform data for and interface with application software (col. 10, lines 27-34).

Regarding claim 7, Abu El Ata teaches wherein said business solution artifacts includes business-business connectors that transform data for and interface with external business systems (col. 17, lines 5-7, Fig. 3).

Regarding claim 8, Abu El Ata teaches wherein said business solution artifacts includes portal artifacts that enable human users to interact with the solution (col. 9, lines 7-15, Fig. 3).

Regarding claim 9, Abu El Ata teaches means for defining details of one or more said IT solution artifacts in a manner such that said solution artifacts may be bound and deployed to one or more specific runtime platforms (col. 2, lines 11-13, col. 8, lines 16-21).

Regarding claim 10, Abu El Ata teaches wherein said transforming means transforms said key performance indicators into IT probes in the IT executable solution model, said probes for real-time monitoring and reporting business process performance as measured by said key performance indicators defined in the operation model (col. 3, lines 37-44, col. 5, lines 19-25, col. 7, lines 45-47, col. 11, lines 14-20).

Regarding claim 11, Abu El Ata teaches means for recommending or effecting changes to a business process to improve its performance in view of said business measuring means (col. 3, lines 37-44, col. 5, lines 19-25, col. 7, lines 45-47, col. 11, lines 14-20).

Regarding claim 12, Abu El Ata teaches wherein said means for measuring and comparing business performance includes a simulation means implementing simulation models in at least one of the strategy, operation, execution and implementation models (col. 6, lines 40-51).

Regarding claim 18, Abu El Ata teaches a method for creating and managing a business process integration solution comprising the steps of:

a) modeling a business strategy including elements representing business measurements and initiatives according to defined business goals and objectives of an entity (col. 4, lines 8-10, 18-26 (criteria are objectives), and 40-41);

b) modeling business operations of said entity in terms of business process elements including process tasks, artifact flows and artifact repositories, and business commitment elements including incorporating key performance indicators (col. 4, lines 55-67, col. 5, lines 1-2, performance and cost criteria are key performance indicators, sub processes and functions are tasks, scope identification are artifacts flows, artifact repositories are inherent);

c) mapping elements of the strategy model with artifact and process elements of the operations model (col. 4, lines 55-65); and,

d) measuring business performance and comparing performance measurements against said key performance indicators, wherein said business strategy and operation model process elements may be continuously refined over a solution development lifecycle as a result of process measurements and comparing (col. 3, lines 37-44, col. 5, lines 19-25, col. 7, lines 45-47, col. 11, lines 14-20).

Regarding claim 19, Abu El Ata teaches transforming operations model elements into a platform independent information technology (IT) solution model comprising business solution artifacts (col. 2, lines 7-11, col. 5, lines 26-29, col. 6, lines 34-36, and col. 7, lines 10-13).

Regarding claims 20, Abu El Ata teaches wherein solution artifacts include one or more selected from the group comprising: business objects (col. 9, lines 22-31, loan applications are business documents), adaptive business objects (col. 9, lines 22-31, loan applications have different states), macroflows, microflows (col. 9, lines 54-60, critical path contains interruptible

and non-interruptible process flows), application adapters (col. 10, lines 27-34), business-business connectors (col. 17, lines 5-7, Fig. 3), and portal artifacts (col. 9, lines 7-15, Fig. 3).

Regarding claim 21, Abu El Ata teaches defining details of one or more said IT solution artifacts, binding and deploying said solution artifacts to one or more specific runtime platforms (col. 2, lines 11-13, col. 8, lines 16-21).

Regarding claims 22, Abu El Ata teaches transforming said key performance indicators into IT probes in the IT executable solution model, said probes enabling real-time monitoring and reporting of business process performance as measured by said key performance indicators defined in the operation model (col. 3, lines 37-44, col. 5, lines 19-25, col. 7, lines 45-47, col. 11, lines 14-20).

Regarding claims 23, Abu El Ata teaches recommending or effecting changes to a business process to improve its performance in view of said monitoring (col. 3, lines 37-44, col. 5, lines 19-25, col. 7, lines 45-47, col. 11, lines 14-20).

Regarding claims 25, Abu El Ata teaches a computer storage device tangibly embodying a plurality of instructions for carrying out a method for creating and managing a business process integration solution, the method steps comprising:

a) modeling a business strategy including elements representing business measurements and initiatives according to defined business goals and objectives of an entity (col. 4, lines 8-10, 18-26 (criteria are objectives), and 40-41);

b) modeling business operations of said entity in terms of business process elements including process tasks, artifact flows and artifact repositories, and business commitment elements including incorporating key performance indicators (col. 4, lines 55-67, col. 5, lines 1-

Art Unit: 4182

2, performance and cost criteria are key performance indicators, sub processes and functions are tasks, scope identification are artifacts flows, artifact repositories are inherent);

c) mapping elements of the strategy model with artifact and process elements of the operations model (col. 4, lines 55-65); and,

d) measuring business performance and comparing performance measurements against said key performance indicators, wherein said business strategy and operation model process elements may be continuously refined over a solution development lifecycle as a result of process measurements and comparing (col. 3, lines 37-44, col. 5, lines 19-25, col. 7, lines 45-47, col. 11, lines 14-20).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 13-16 and 24 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Abu El Ata (US 6,990,437 B1) as applied to claims 1-12, 18-23, and 25, further in view of Covino et al. (US 2006/0203732 A1).

Regarding claim 13, Abu El Ata does not teach wherein said means for modeling business operations of said entity include implementing a business level modeling language for formally representing said business operations.

Covino teaches wherein said means for modeling business operations of said entity include implementing a business level modeling language for formally representing said business operations (par. 135-137).

The inventions of Abu El Ata and Covino pertain to business systems and infrastructures. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, as Covino does not teach away from or contradict Abu El Ata, but rather, teaches a function that was not addressed. Additionally, the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus, it would have been obvious to combine the teachings, motivated by the well-known advantages of specifically a business level modeling language, as taught by Covino (par. 135, 136).

Regarding claim 14, Abu El Ata does not teach wherein said business level modeling language for formally representing said business operations models business operations according to a schema.

Covino teaches wherein said business level modeling language for formally representing said business operations models business operations according to a schema (par. 139).

The inventions of Abu El Ata and Covino pertain to business systems and infrastructures. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, as Covino does not teach away from or contradict Abu El Ata, but rather, teaches a function that was not addressed. Additionally, the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus, it would have been obvious to combine the teachings, motivated by the fact that schema, particularly XML schema, are well-known in the art, as taught by Covino (par. 139).

Regarding claim 15, Abu El Ata does not teach wherein said schema represents an information model including artifacts and business events pertaining to an operational view of said business entity.

Covino teaches wherein said schema represents an information model including artifacts and business events pertaining to an operational view of said business entity (par. 140-144).

The inventions of Abu El Ata and Covino pertain to business systems and infrastructures. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, as Covino does not teach away from or contradict Abu El Ata, but rather, teaches a

function that was not addressed. Additionally, the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus, it would have been obvious to combine the teachings, motivated by the advantage in model accuracy and usefulness by including artifacts and business events in the information model.

Regarding claim 16, Abu El Ata does not teach wherein said schema represents business functions including processes, tasks, artifact repositories and their interconnection.

Covino teaches wherein said schema represents business functions including processes, tasks, artifact repositories and their interconnection (par. 140-143).

The inventions of Abu El Ata and Covino pertain to business systems and infrastructures. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, as Covino does not teach away from or contradict Abu El Ata, but rather, teaches a function that was not addressed. Additionally, the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus, it would have been obvious to combine the teachings, motivated by the advantage in model accuracy and usefulness by including processes, tasks, artifact repositories and their interconnection.

Regarding claim 24, Abu El Ata does not teach implementing a business level modeling language for formally representing said business operations, said representing of said business operations models business operations according to a schema.

Covino teaches implementing a business level modeling language for formally representing said business operations, said representing of said business operations models business operations according to a schema (par. 135-137, 139).

The inventions of Abu El Ata and Covino pertain to business systems and infrastructures. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, as Covino does not teach away from or contradict Abu El Ata, but rather, teaches a function that was not addressed. Additionally, the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus, it would have been obvious to combine the teachings, motivated by the well-known advantages of specifically a business level modeling language, as taught by Covino (par. 135, 136), and the fact that schema, particularly XML schema, are well-known in the art, as taught by Covino (par. 139).

12. **Claim 17 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Abu El Ata (US 6,990,437 B1), as applied to claims 1-12, 18-23, and 25, in view of Covino et al. (US 2006/0203732 A1), as applied to claims 13-16 and 24, further in view of Cunningham et al. (US 2007/0129953 A1).

Regarding claims 17, neither Abu El Ata nor Covino teaches wherein said schema represents resources including roles and resource groups.

Cunningham teaches wherein said schema represents resources including roles and resource groups (par. 41, 44).

The inventions of Abu El Ata, Covino, and Cunningham pertain to business systems and infrastructures. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, as Cunningham does not teach away from or contradict Abu El Ata or

Art Unit: 4182

Covino, but rather, teaches a function that was not addressed. Additionally, the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus, it would have been obvious to combine the teachings, motivated by the well-known advantage of improved information management as taught by Cunningham (par. 4).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hauser et al. (US 2004/0249645 A1) teaches turning platform independent business models into platform specific executable IT specifications.

Flaxer (US 2004/0162741 A1) teaches schemas, workflows, microflows and macroflows, and modeling business processes.

Bowman-Amuah (US 2001/0052108 A1) teaches developing an architecture framework, including tracking performance based on metrics.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaime F. Cardenas-Navia whose telephone number is (571)270-1525. The examiner can normally be reached on Mon-Thur, 9:30AM - 8:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571) 272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

February 27, 2008

/Jaime F Cardenas-Navia/
Examiner, Art Unit 4182

/Thu Nguyen/
Supervisory Patent Examiner, Art Unit 4182